

Monzeglio, Hope, NMENV

From: Rajen, Gaurav [Gaurav.Rajen@wnr.com]
Sent: Thursday, September 24, 2009 2:32 PM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Riege, Ed; Turri, Mark; Cobrain, Dave, NMENV
Subject: Flow rate and benzene data for August 2009
Attachments: August 24.pdf; August 4.pdf; August 10.pdf; August 17.pdf

Dear Hope:

It is a pleasure to send you our flow rate data and benzene strippers' analytical data for the month of August, 2009.

The analytical data are attached in the reports we have received from Hall Environmental Laboratory.

Through the benzene strippers 1 and 2 after the New API Separator (NAPIS), our average flow rate for the month of August 2009 in gallons per minutes was 264 GPM (with a maximum of approximately 324 GPM and a minimum of approximately 164 GPM). We measure these flows by logging the depth in a 60 degrees trapezoidal flume approximately 6 times a day, and then averaging the depth readings, and using the flume's calibration curve to estimate the flow rate.

For the benzene stripper 3 in our process area, in August only our Desalter effluent was routed to this stripper. Previously, we have sent you details of other units that can be routed at times. The Desalter effluents are approximately 4.5% of our crude charge rates, and for August this works out to approximately 19 GPM as the monthly average flow rate. As our crude charge rate varied through August, we estimate that the minimum and maximum average daily flow rates through the benzene stripper 3 were 17.7 GPM and 20 GPM for the month of August, 2009.

Best regards,

Raj

This inbound email has been scanned for malicious software and transmitted safely to you using Webroot Email Security.

9/24/2009



COVER LETTER

Wednesday, August 12, 2009

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: BZ Strippers

Dear Gaurav Rajen:

Order No.: 0908082

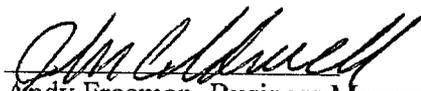
Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 8/6/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,


Andy Freeman, Business Manager

For Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 12-Aug-09

CLIENT: Western Refining Southwest, Gallup
 Project: BZ Strippers

Lab Order: 0908082

Lab ID: 0908082-01
 Client Sample ID: 3rd BZ Stripper-IN

Collection Date: 8/4/2009 8:40:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	23000	1000		µg/L	1000	8/10/2009 6:11:42 PM
Toluene	24000	1000		µg/L	1000	8/10/2009 6:11:42 PM
Ethylbenzene	1800	50		µg/L	50	8/10/2009 6:40:56 PM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	8/10/2009 6:40:56 PM
Xylenes, Total	11000	100		µg/L	50	8/10/2009 6:40:56 PM
Surr: 4-Bromofluorobenzene	86.1	80.4-119		%REC	50	8/10/2009 6:40:56 PM

Lab ID: 0908082-02
 Client Sample ID: 3rd BZ Stripper-OUT

Collection Date: 8/4/2009 8:55:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	2200	200		µg/L	200	8/10/2009 7:39:19 PM
Toluene	3000	200		µg/L	200	8/10/2009 7:39:19 PM
Ethylbenzene	250	20		µg/L	20	8/10/2009 8:08:26 PM
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	8/10/2009 8:08:26 PM
Xylenes, Total	1800	40		µg/L	20	8/10/2009 8:08:26 PM
Surr: 4-Bromofluorobenzene	91.2	80.4-119		%REC	20	8/10/2009 8:08:26 PM

Lab ID: 0908082-03
 Client Sample ID: BZ Stripper-1 & 2 IN

Collection Date: 8/4/2009 9:25:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	3000	200		µg/L	200	8/10/2009 8:37:29 PM
Toluene	6800	200		µg/L	200	8/10/2009 8:37:29 PM
Ethylbenzene	560	20		µg/L	20	8/10/2009 9:06:31 PM
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	8/10/2009 9:06:31 PM
Xylenes, Total	3700	40		µg/L	20	8/10/2009 9:06:31 PM
Surr: 4-Bromofluorobenzene	85.2	80.4-119		%REC	20	8/10/2009 9:06:31 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 12-Aug-09

CLIENT: Western Refining Southwest, Gallup
 Project: BZ Strippers

Lab Order: 0908082

Lab ID: 0908082-04

Collection Date: 8/4/2009 9:40:00 AM

Client Sample ID: BZ Stripper-1 & 2 OUT

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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EPA METHOD 8260: VOLATILES SHORT LIST

Analyst: HL

Benzene	210	10		µg/L	10	8/10/2009 10:33:53 PM
Toluene	530	10		µg/L	10	8/10/2009 10:33:53 PM
Ethylbenzene	63	10		µg/L	10	8/10/2009 10:33:53 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	8/10/2009 10:33:53 PM
Xylenes, Total	430	20		µg/L	10	8/10/2009 10:33:53 PM
Surr: 4-Bromofluorobenzene	90.9	80.4-119		%REC	10	8/10/2009 10:33:53 PM

Qualifiers: * Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: BZ Strippers

Work Order: 0908082

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: EPA Method 8260: Volatiles Short List

Sample ID: 5ml rb

MBLK

Batch ID: R34856 Analysis Date: 8/10/2009 8:54:28 AM

Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						

Sample ID: 100ng lcs_b

Batch ID: R34856 Analysis Date: 8/10/2009 11:22:43 AM

Benzene	19.67	µg/L	1.0	98.3	86.8	120			
Toluene	19.15	µg/L	1.0	95.8	64.1	127			

Qualifiers:

E Estimated value
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received:

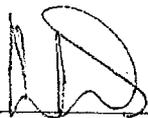
8/6/2009

Work Order Number **0908082**

Received by: **ARS**

Checklist completed by:

Signature



8/6/09

Date

Sample ID labels checked by:

Initials



Matrix:

Carrier name: UPS

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Number of preserved bottles checked for pH: _____
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Container/Temp Blank temperature?	5.7°	<6° C Acceptable		<2 >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

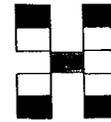
Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN - Refining
Gallup Refinery
 Mailing Address: RT 3 Box 9
Gallup NM 87301
 Phone #: 505 722 3833
 email or Fax#: 505 722 0210
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush _____
 Project Name:
BZ Strippers
 Project #:
MONTHLY CONDITIONS (BTEX-MTBE)
 Project Manager:
GAUTAU RAJEN
 Sampler: A. Dorsey
 On-site: _____
 Sample Temperature: _____



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	SEAL No	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA) (BTEX - MTBE)	8270 (Semi-VOA)	Air Bubbles (Y or N)
08-04-09	0840		3 rd Bz Stripper - IN	40ML-3		0908089										X		
08-04-09	0855		3 rd Bz Stripper - OUT	40ML-3												X		
08-04-09	0925		Bz Stripper 1 & 2 IN	40ML-3												X		
08-04-09	0940		Bz Stripper 1 & 2 OUT	40ML-3												X		

Date: 08-05-09 Time: 1200 Relinquished by: Alvin [Signature]
 Received by: [Signature] Date: 8/6/09 Time: 12:10
 Date: _____ Time: _____ Relinquished by: _____
 Received by: _____ Date: _____ Time: _____

Remarks: Collected LAB samples for WESTERN LAB BZ Stripper 1 & 2 IN BZ Stripper 1 & 2 OUT

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



COVER LETTER

Tuesday, August 25, 2009

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: BZ Strippers

Dear Gaurav Rajen:

Order No.: 0908184

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 8/12/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 25-Aug-09

CLIENT: Western Refining Southwest, Gallup
 Project: BZ Strippers

Lab Order: 0908184

Lab ID: 0908184-01
 Client Sample ID: 3rd BZ Stripper-IN

Collection Date: 8/10/2009 12:40:00 PM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Analyst: DAM						
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	24000	500		µg/L	500	8/24/2009 11:19:18 AM
Toluene	23000	500		µg/L	500	8/24/2009 11:19:18 AM
Ethylbenzene	1800	500		µg/L	500	8/24/2009 11:19:18 AM
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	500	8/24/2009 11:19:18 AM
Xylenes, Total	12000	1000		µg/L	500	8/24/2009 11:19:18 AM
Surr: 1,2-Dichloroethane-d4	103	54.6-141		%REC	500	8/24/2009 11:19:18 AM
Surr: 4-Bromofluorobenzene	98.5	60.1-133		%REC	500	8/24/2009 11:19:18 AM
Surr: Dibromofluoromethane	97.0	78.5-130		%REC	500	8/24/2009 11:19:18 AM
Surr: Toluene-d8	98.0	79.5-126		%REC	500	8/24/2009 11:19:18 AM

Lab ID: 0908184-02
 Client Sample ID: 3rd BZ Stripper-OUT

Collection Date: 8/10/2009 12:55:00 PM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Analyst: DAM						
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	6600	100		µg/L	100	8/24/2009 11:47:28 AM
Toluene	5700	100		µg/L	100	8/24/2009 11:47:28 AM
Ethylbenzene	450	100		µg/L	100	8/24/2009 11:47:28 AM
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	8/24/2009 11:47:28 AM
Xylenes, Total	3200	200		µg/L	100	8/24/2009 11:47:28 AM
Surr: 1,2-Dichloroethane-d4	107	54.6-141		%REC	100	8/24/2009 11:47:28 AM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	100	8/24/2009 11:47:28 AM
Surr: Dibromofluoromethane	101	78.5-130		%REC	100	8/24/2009 11:47:28 AM
Surr: Toluene-d8	101	79.5-126		%REC	100	8/24/2009 11:47:28 AM

Lab ID: 0908184-03
 Client Sample ID: BZ Stripper 1&2 IN

Collection Date: 8/10/2009 1:20:00 PM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Analyst: DAM						
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	15000	500		µg/L	500	8/24/2009 12:15:35 PM
Toluene	26000	500		µg/L	500	8/24/2009 12:15:35 PM
Ethylbenzene	1700	500		µg/L	500	8/24/2009 12:15:35 PM
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	500	8/24/2009 12:15:35 PM
Xylenes, Total	11000	1000		µg/L	500	8/24/2009 12:15:35 PM
Surr: 1,2-Dichloroethane-d4	103	54.6-141		%REC	500	8/24/2009 12:15:35 PM
Surr: 4-Bromofluorobenzene	99.7	60.1-133		%REC	500	8/24/2009 12:15:35 PM
Surr: Dibromofluoromethane	98.7	78.5-130		%REC	500	8/24/2009 12:15:35 PM
Surr: Toluene-d8	100	79.5-126		%REC	500	8/24/2009 12:15:35 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 25-Aug-09

CLIENT: Western Refining Southwest, Gallup
Project: BZ Strippers

Lab Order: 0908184

Lab ID: 0908184-04

Collection Date: 8/10/2009 1:35:00 PM

Client Sample ID: BZ Stripper 1&2 OUT

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						
						Analyst: DAM
Benzene	1000	50		µg/L	50	8/24/2009 12:43:51 PM
Toluene	2300	50		µg/L	50	8/24/2009 12:43:51 PM
Ethylbenzene	240	50		µg/L	50	8/24/2009 12:43:51 PM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	8/24/2009 12:43:51 PM
Xylenes, Total	1700	100		µg/L	50	8/24/2009 12:43:51 PM
Surr: 1,2-Dichloroethane-d4	103	54.6-141		%REC	50	8/24/2009 12:43:51 PM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	50	8/24/2009 12:43:51 PM
Surr: Dibromofluoromethane	94.9	78.5-130		%REC	50	8/24/2009 12:43:51 PM
Surr: Toluene-d8	99.2	79.5-126		%REC	50	8/24/2009 12:43:51 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: BZ Strippers

Work Order: 0908184

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 5ml rb											
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs											
Benzene	21.94	µg/L	1.0	20	0	110	86.8	120			
Toluene	19.09	µg/L	1.0	20	0	95.4	64.1	127			
Sample ID: 100ng lcsd											
Benzene	21.34	µg/L	1.0	20	0	107	86.8	120	2.81	20	

Batch ID: R35018 Analysis Date: 8/24/2009 9:26:37 AM

Batch ID: R35018 Analysis Date: 8/24/2009 10:22:59 AM

Batch ID: R35018 Analysis Date: 8/25/2009 4:39:05 AM

Qualifiers:

- E Estimated value
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received:

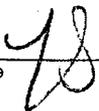
8/12/2009

Work Order Number **0908184**

Received by: **TLS**

Checklist completed by:

Signature



Sample ID labels checked by:

Initials



8/12/09
Date

Matrix:

Carrier name: UPS

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Number of preserved bottles checked for pH: <u> </u> <i><2 >12 unless noted below.</i>
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Container/Temp Blank temperature?	3.2°	<i><6° C Acceptable</i>		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

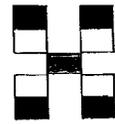
Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN-REFINING
Gallup Refinery
 Mailing Address: RT 3 Box 9
Gallup NM 87301
 Phone #:
 email or Fax#:
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush
 Project Name: Bz Strippers
 Project #:
 Project Manager: GAURAV RAJEN
 Sampler: ALVIN DOISEY
 On Ice: Yes No
 Sample Temperature: 30



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALING NO. <u>09108189</u>	BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 BTEX-MTBE	Air Bubbles (Y or N)	
08-10-09	1240	A9	3 rd Bz Stripper-IN	40MI-3	HCl	1														
08-10-09	1255		3 rd Bz Stripper-OUT	40MI-3	HCl	2														
08-10-09	1320		Bz Stripper 1st IN	40MI-3	HCl	3														
08-10-09	1335		Bz Stripper 1st OUT	40MI-3	HCl	4														

Date: 08-11-09 Time: 1200 Relinquished by: [Signature]
 Received by: [Signature] Date: 8/10/09 Time: 1105
 Date: _____ Time: _____ Relinquished by: _____
 Received by: _____ Date: _____ Time: _____

Remarks: collected western LAB samples API 1st 2

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



COVER LETTER

Friday, August 28, 2009

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: BZ Strippers

Dear Gaurav Rajen:

Order No.: 0908352

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 8/21/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 28-Aug-09

CLIENT: Western Refining Southwest, Gallup
 Project: BZ Strippers

Lab Order: 0908352

Lab ID: 0908352-01
 Client Sample ID: BZ 3 IN

Collection Date: 8/17/2009 10:30:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	40000	500		µg/L	500	8/26/2009 10:31:54 PM
Toluene	34000	500		µg/L	500	8/26/2009 10:31:54 PM
Ethylbenzene	1900	500		µg/L	500	8/26/2009 10:31:54 PM
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	500	8/26/2009 10:31:54 PM
Xylenes, Total	13000	1000		µg/L	500	8/26/2009 10:31:54 PM
Surr: 4-Bromofluorobenzene	127	60.1-133		%REC	500	8/26/2009 10:31:54 PM

Lab ID: 0908352-02
 Client Sample ID: BZ 3 OUT

Collection Date: 8/17/2009 10:45:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	260	50		µg/L	50	8/27/2009 11:52:01 AM
Toluene	310	50		µg/L	50	8/27/2009 11:52:01 AM
Ethylbenzene	ND	50		µg/L	50	8/27/2009 11:52:01 AM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	8/27/2009 11:52:01 AM
Xylenes, Total	250	100		µg/L	50	8/27/2009 11:52:01 AM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	50	8/27/2009 11:52:01 AM

Lab ID: 0908352-03
 Client Sample ID: BZ 1-2 IN

Collection Date: 8/17/2009 11:30:00 AM
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						
Benzene	4400	500		µg/L	500	8/26/2009 11:28:06 PM
Toluene	12000	500		µg/L	500	8/26/2009 11:28:06 PM
Ethylbenzene	1100	500		µg/L	500	8/26/2009 11:28:06 PM
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	500	8/26/2009 11:28:06 PM
Xylenes, Total	6400	1000		µg/L	500	8/26/2009 11:28:06 PM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	500	8/26/2009 11:28:06 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 28-Aug-09

CLIENT: Western Refining Southwest, Gallup
Project: BZ Strippers

Lab Order: 0908352

Lab ID: 0908352-04

Collection Date: 8/17/2009 11:45:00 AM

Client Sample ID: BZ 1-2 OUT

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: DAM
Benzene	120	50		µg/L	50	8/26/2009 11:56:13 PM
Toluene	500	50		µg/L	50	8/26/2009 11:56:13 PM
Ethylbenzene	110	50		µg/L	50	8/26/2009 11:56:13 PM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	8/26/2009 11:56:13 PM
Xylenes, Total	680	100		µg/L	50	8/26/2009 11:56:13 PM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	50	8/26/2009 11:56:13 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: BZ Strippers

Work Order: 0908352

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	--------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8260: Volatiles Short List

Batch ID: R35047 **Analysis Date:** 8/26/2009 9:12:55 AM

Sample ID: 5ml rb

MBLK

Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								

Batch ID: R35047 **Analysis Date:** 8/26/2009 10:09:03 AM

Sample ID: 100ng lcs

Benzene	21.40	µg/L	1.0	20	0	107	86.8	120			
Toluene	20.36	µg/L	1.0	20	0	102	64.1	127			

Qualifiers:

- E Estimated value
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received:

8/21/2009

Work Order Number **0908352**

Received by: **ARS**

TK

Checklist completed by:

Signature

[Handwritten Signature]

8/21/09

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: **FedEx**

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present Not Shipped
- Custody seals intact on sample bottles? Yes No N/A
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Preservation labels on bottle and cap match? Yes No N/A
- Water - pH acceptable upon receipt? Yes No N/A

Number of preserved bottles checked for pH:

<2 >12 unless noted below.

Container/Temp Blank temperature?

1.8°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN REFINING

GALLUP REFINERY

Mailing Address: RT 3 Box 9

GALLUP, NM 87301

Phone #: 505 722 3833

email or Fax#: 505 722 0210

QA/QC Package:

Standard Level 4 (Full Validation)

Accreditation

NELAP Other

EDD (Type)

Turn-Around Time:

Standard Rush

Project Name:

B2 STRIPPERS

Project #:

MONTHLY CONDITIONS

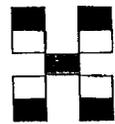
Project Manager:

GAURAV RAJEN

Sampler: G. RAJEN

Office: ~~Yes~~ No

Sample temperature: 78



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA) (BTEX-MTBE)	8270 (Semi-VOA)	Air Bubbles (Y or N)
8/17	10:30	A9	B2 3 IN	40ml-3	HCl	0908352										X		
8/17	10:45		B2 3 OUT	40ml-3	HCl											X		
8/17	11:30		B21-2 IN	40ml-3	HCl											X		
8/17	11:45		B21-2 OUT	40ml-3	HCl											X		

Date: 8/20 Time: 10:30 Relinquished by: G. RAJEN

Received by: [Signature] Date: 8/20 Time: 9:20

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



COVER LETTER

Thursday, September 03, 2009

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Benzene Strippers

Dear Gaurav Rajen:

Order No.: 0908491

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 8/28/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 03-Sep-09

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers
Lab Order: 0908491

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0908491-03A: Sample pH is 2.5
Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0908491-04A: Sample pH is 2.5

Hall Environmental Analysis Laboratory, Inc.

Date: 03-Sep-09

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers

Lab Order: 0908491

Lab ID: 0908491-01

Collection Date: 8/24/2009 2:58:00 PM

Client Sample ID: BZ 3 IN

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1300		µg/L	500	9/2/2009 3:02:00 PM
Benzene	22000	500		µg/L	500	9/2/2009 3:02:00 PM
Toluene	20000	500		µg/L	500	9/2/2009 3:02:00 PM
Ethylbenzene	1100	500		µg/L	500	9/2/2009 3:02:00 PM
Xylenes, Total	7200	1000		µg/L	500	9/2/2009 3:02:00 PM
Surr: 4-Bromofluorobenzene	99.4	65.9-130		%REC	500	9/2/2009 3:02:00 PM

Lab ID: 0908491-02

Collection Date: 8/24/2009 3:05:00 PM

Client Sample ID: BZ 3 OUT

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	9/2/2009 3:32:24 PM
Benzene	260	50		µg/L	50	9/2/2009 3:32:24 PM
Toluene	570	50		µg/L	50	9/2/2009 3:32:24 PM
Ethylbenzene	87	50		µg/L	50	9/2/2009 3:32:24 PM
Xylenes, Total	650	100		µg/L	50	9/2/2009 3:32:24 PM
Surr: 4-Bromofluorobenzene	99.5	65.9-130		%REC	50	9/2/2009 3:32:24 PM

Lab ID: 0908491-03

Collection Date: 8/24/2009 3:23:00 PM

Client Sample ID: BZ 1-2 IN

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	9/2/2009 4:02:47 PM
Benzene	2000	200		µg/L	200	9/2/2009 4:02:47 PM
Toluene	5100	200		µg/L	200	9/2/2009 4:02:47 PM
Ethylbenzene	490	200		µg/L	200	9/2/2009 4:02:47 PM
Xylenes, Total	3300	400		µg/L	200	9/2/2009 4:02:47 PM
Surr: 4-Bromofluorobenzene	93.0	65.9-130		%REC	200	9/2/2009 4:02:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 03-Sep-09

CLIENT: Western Refining Southwest, Gallup
 Project: Benzene Strippers

Lab Order: 0908491

Lab ID: 0908491-04
 Client Sample ID: BZ 1-2 OUT

Collection Date: 8/24/2009 3:28:00 PM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Analyst: NSB						
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	9/2/2009 4:33:06 PM
Benzene	110	50		µg/L	50	9/2/2009 4:33:06 PM
Toluene	430	50		µg/L	50	9/2/2009 4:33:06 PM
Ethylbenzene	84	50		µg/L	50	9/2/2009 4:33:06 PM
Xylenes, Total	580	100		µg/L	50	9/2/2009 4:33:06 PM
Surr: 4-Bromofluorobenzene	88.5	65.9-130		%REC	50	9/2/2009 4:33:06 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: Benzene Strippers

Work Order: 0908491

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	--------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB

MBLK

Batch ID: R35144 Analysis Date: 9/2/2009 9:30:29 AM

Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R35144 Analysis Date: 9/2/2009 9:36:12 PM

Methyl tert-butyl ether (MTBE)	19.63	µg/L	2.5	20	0	98.2	51.2	138			
Benzene	19.51	µg/L	1.0	20	0	97.6	85.9	113			
Toluene	19.29	µg/L	1.0	20	0.658	93.2	86.4	113			
Ethylbenzene	19.54	µg/L	1.0	20	0.206	96.7	83.5	118			
Xylenes, Total	58.67	µg/L	2.0	60	0	97.8	83.4	122			

Qualifiers:

- | | | | |
|---|--|----|--|
| E | Estimated value | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike recovery outside accepted recovery limits |

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received:

8/28/2009

Work Order Number **0908491**

Received by: **TLS**

Checklist completed by: _____

Signature



8/28/09
Date

Sample ID labels checked by: _____

Initials



Matrix:

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present Not Shipped
- Custody seals intact on sample bottles? Yes No N/A
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Preservation labels on bottle and cap match? Yes No N/A
- Water - pH acceptable upon receipt? Yes No N/A
- Container/Temp Blank temperature? **6.6°** <6° C Acceptable
If given sufficient time to cool.

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

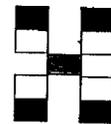
Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN REFINING
Gallup Refinery
 Mailing Address: RT 3 Box 9
Gallup NM 87301
 Phone #: 505 722 3833
 email or Fax#: 505 722 0210
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush _____
 Project Name: BZ STRIPPERS
 Project #: _____
WEEKLY
 Project Manager: GAURAV, RAJEN
 Sampler: ALVIN DORSEY
 Sample Temperature: _____



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	Temp	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 B BTEX - ANT DE	Air Bubbles (Y or N)	
08/24	1458	Aq	BZ 3 IN	40ML-3	HCl	1														
08/24	1505		BZ 3 OUT	40ML-3	HCl	2													X	
08/24	1523		BZ 1-2 IN	40ML-3	HCl	3													X	
08/24	1528		BZ 1-2 OUT	40ML-3	HCl	4													X	

Date: 08/27/09 Time: 1200 Relinquished by: Alvin Dorsey
 Date: _____ Time: _____ Relinquished by: _____

Received by: [Signature] Date: 8/28/09 Time: 910
 Received by: _____ Date: _____ Time: _____

Remarks: COLLECTED LAB SAMPLES FOR WESTERN LAB BZ 1-2 IN-OUT

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.